ABSTRACT OF THE DISCLOSURE

The present invention provides a method of controlling data flow within a network device. The method includes the steps of snooping a data packet before the data packet is stored in a memory buffer of the network device to determine a packet size, aggregating the packet size to generate a total number of data packets within a burst if the packet size exceeds a predetermined packet size. The method also includes the steps of lowering a threshold of the memory buffer to a reset threshold if the total number of data packets exceeds a predetermined number of consecutive data packets and activating a pause frame based upon the reset threshold to temporarily suspend transmission of incoming data packets to the network device.